## **REMARKS**

Claims 9, 11 and 13-18 are pending in this application. Claims 13-16 stand withdrawn. By this Amendment, claim 9 is amended for improved clarity and to incorporate the subject matter of claim 12 and claim 12 is canceled. Support for claim 9 can be found at page 16, line 20 to page 17 line 7 of the specification (labeled Example 1). No new matter is added.

## I. §112 Rejection

The Office Action rejects claims 9, 11, 12, 17 and 18 under §112, first and second paragraphs, for allegedly failing to comply with the written description requirement and being indefinite. This rejection is respectfully traversed.

Claim 9 recites that the aggregate particle material, water, an organic binder and a pore former and mixed and kneaded to form a clay and that colloidal particles are then added as a additive to the clay. The Office Action asserts that the instant specification contradicts the amended claim, and instead states that the colloidal particles are mixed the with other ingredients to form the clay. See page 8, lines 7-11 and page 11, lines 20-22 of instant specification.

However, the claims do not contradict the instant specification. Page 16, lines 21-27 of the specification state that the aggregate particle material will have a particular proportion of materials in ratio. For instance, Example 1 states that the aggregate particle material is composed of 80 parts by mass silicon carbine power and 20 parts by mass metal silicon powder was prepared. These material comprised the entirety of the mass of the "aggregate particle material." The specification then further explains that an additional mass of silica sol (a colloidal particle) was then added to the aggregate particle material in a ratio of 1.2 parts by mass for every 100 parts by mass of the aggregate particle material. See page 17, line 1.

As such, the specification denotes that the colloidal particles are added <u>after</u> the aggregate particle materials, as an additive.

Applicants submit that page 8, lines 7-11 and page 11, lines 20-22 of instant specification must be read in light of the remainder of the specification, and in particular Example 1. Applicants therefore submit the claims do not contradict the specification.

The Office Action also asserts the previous claim term "super-additive" is indefinite. Claim 9, as amended, removes this term and now recites that the colloidal particles are added to the clay in proportion to the amount of aggregate particle material in the clay. This feature is supported at page 16, line 20 to page 17 line 7 of the specification. As such, withdrawal of the rejection of claims 9 and claims 11, 12 17 and 18 depending therefrom, is respectfully requested

## II. Double Patenting Rejection

Claims 9, 11 and 12 are provisionally rejection for non-statutory obviousness-type double patenting over claims 7 and 9 of copending Application No. 10/531,873. This rejection is respectfully traversed.

Applicants ask that the provisional rejection be held in abeyance until the current applications is otherwise in condition for allowance, or until Application No. 10/531,873 is issued as a patent.

## III. §103(a) Rejection

The Office Action rejects claims 9, 11, 12, 17 and 18 under 35 U.S.C. §103(a) over WO 01/16049 to Beall in view of U.S. Patent No. 5,069,697 to Hamaguchi et al. ("Hamaguchi"). This rejection is respectfully traversed.

Claim 9, as amended, recites adding colloidal particles to the clay in proportion to the amount of aggregate particle material in the clay. Claim 9 also recites the clay contains 0.1 to 10 parts by mass of the colloidal particles for every 100 parts by mass of the aggregate

particle material. As argued in the previous Amendment Beall discloses a binder system in which there are 100 parts by weight of the "inorganic, alumina and silica forming sources and talc, raw material mixture." See page 9, lines 16-21 of Beall. This combination of components is allegedly equivalent to the recited aggregate particle material of claim 9. Beall further discloses colloidal silica as one of the above mentioned silica forming sources. Thus, the colloidal silica disclosed by Beall is used as part of the alleged aggregate particle material.

The current Office Action asserts that "the attempt by Applicant to label some of the materials of Beall within, and other material outside of, an arbitrary group" does not overcome that Beall mixes the same materials. See page 6, lines 11-14 of the Office Action. However, the designation of which material lie in and out of the aggregate particle material is extremely relevant because claim 9 recites that the colloidal particles are added by mass based on the separate mass of the aggregate particle materials.

Applicants test results, shown in Table 1 (on page 21 of the specification) detail the criticality of the addition of the colloidal particles as a separate additive relative the aggregate particle material. Beall does not disclose the criticality of the two unique groups, nor the advantages provided by such a calculation to a method of production.

Beall does not disclose adding a first group of materials to a second group of materials, based on the mass of the second group, because Beall does not disclose two distinct groups. Additionally, Beall does not disclose that the first group is added after the mass of the second group has already been determined. Therefore, Beall does not disclose a method in which a colloidal particles are added to the clay in proportion to the amount of aggregate particle material in the clay and that the that clay contains 0.1 to 10 parts by mass of the colloidal particles for every 100 parts by mass of the aggregate particle material.

Furthermore, Applicants respectfully note that two different methods of production can produce the same final product, but be patentably different, if the methods contain unique

steps that impart some patentable advantage. Applicants respectfully assert that the choice of adding colloidal particles proportion to the amount of aggregate particle material, is patentably different from the method disclosed in Beall.

For at least the above reasons, Applicants assert that Beall and Hamaguchi, either alone or in combination, do not disclose the features of claim, as amended. Accordingly, withdrawal of the rejection of claim 9, and claims 11, 17 and 18, depending therefrom, is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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